Amendments to the Claims

1.   (Original) A method of loss detection to determine containment losses due to seepage and leakage from at least one pool, said method including the steps of maintaining a constant level in said at least one pool, monitoring the nett flow into said at least one pool to maintain said constant level, determining the evaporation losses and calculating the containment losses by subtracting the evaporation losses from the nett flow into said at least one pool.

2.   (Original) A method of loss detection to determine containment losses due to seepage and leakage from at least one pool, said method including the steps of measuring the change in volume of said at least one pool, determining the evaporation losses and calculating the containment losses by subtracting the evaporation losses from the change in volume of said at least one pool.

3.   (Original) The method of claim 1, wherein said at least one pool includes at least first and second flow regulators to allow flow of liquid into and out of said at least one pool respectively, first and second flow sensors co-operating with respective flow regulators and a computational means communicating with said flow regulators and said flow sensors to control operation of said flow regulators, and said computational means determining said containment losses by calculating the measured flow into said at least one pool through said at least first flow regulator and subtracting the measured flow out of said at least one pool through said at least second regulator.

4.   (Currently Amended) The method of ~~any one of claims 1 to 3~~ claim 1, wherein the evaporation losses can be determined by the formula:

$E_{vp} = 0.01 \times P_f \times E_{pp} \times SA$,

[[W]]where:

E_{vp} = the volume (Megalitres) lost to evaporation from the pool water surface for a period 'p'[[.]];

P_f = pan factor (Class A);

E_{pp} = pan evaporation for period 'p' (millimetres); and

SA = surface area of the pool.

5.   (Original) The method of claim 3, wherein said at least one pool includes at least one liquid metered delivery means which communicates with said computational means and the measured flow therefrom is also subtracted from the nett flow into said at least one pool through said at least first flow regulator.

6.   (Currently Amended) The method of claim 3 [[or 5]], wherein said containment losses are divided into losses from theft, evaporation, seepage and leakage where losses from evaporation, seepage and leakage remain constant to allow the theft loss to be determined by said computational means.

7.   (Original) A loss detection system to determine and monitor containment losses for open channel networks, said system including at least first and second flow regulators to allow flow of liquid into and out of at least one pool respectively, first and second flow sensors co-operating with respective flow regulators and a computational means communicating with said flow regulators and said flow sensors to control operation of said flow regulators, and said computational means determining said containment losses by calculating the measured flow into said at least one pool through said at least first flow regulator and subtracting the measured flow out of said at least one pool through said at least second regulator.

8.   (Original) The loss detection system of claim 7, wherein said at least one pool includes at least one liquid metered delivery means which communicates with said computational means and the measured flow therefrom is also subtracted from the measured flow into said at least one pool through said at least first flow regulator.

9.   (Currently Amended) The loss detection system of claim 7 [[or 8]], wherein said containment losses are divided into losses from theft, evaporation, seepage and leakage where losses from evaporation, seepage and leakage remain constant to allow the theft loss to be determined by said computational means.

10.   (Currently Amended) The loss detection system of claim 9, wherein the evaporation losses can be determined by the formula:

PA #7200 v2

$E_{vp} = 0.01 \times P_f \times E_{pp} \times SA_\underline{;}$

[[W]]where:

E_{vp} = the volume (Megalitres) lost to evaporation from the pool water surface for a period 'p'[[.]]__;__

P_f = pan factor (Class A)__;__

E_{pp} = pan evaporation for period 'p' (millimetres)__; and__

SA = surface area of the pool__.__

11.   (Original) A method of loss detection to determine and monitor containment losses for open channel networks, said open channel network including at least first and second flow regulators to allow flow of liquid into and out of at least one pool respectively, first and second flow sensors co-operating with respective flow regulators and a computational means communicating with said flow regulators and said flow sensors to control operation of said flow regulators, said method including the step of determining, using said computational means, said containment losses by calculating the measured flow into said at least one pool through said at least first flow regulator and subtracting the measured flow out of said at least one pool through said at least second regulator.

12.   (Original) The method of claim 11, wherein said at least one pool includes at least one liquid metered delivery means which communicates with said computational means and the measured flow therefrom is also subtracted from the measured flow into said at least one pool through said at least first flow regulator.

13.   (Currently Amended) The method of claim 11 [[or 12]], wherein said containment losses are divided into losses from theft, evaporation, seepage and leakage where losses from evaporation, seepage and leakage remain constant to allow the theft loss to be determined by said computational means.

14.   (Currently Amended) The method of claim 13, wherein the evaporation losses can be determined by the formula:

$E_{vp} = 0.01 \times P_f \times E_{pp} \times SA_\underline{;}$

[[W]]where:

4

E_{vp} = the volume (Megalitres) lost to evaporation from the pool water surface for a period 'p'[[.]];

P_f = pan factor (Class A);

E_{pp} = pan evaporation for period 'p' (millimetres); and

SA = surface area of the pool.

15.   (New) The method of claim 2, wherein the evaporation losses can be determined by the formula:

E_{vp} = 0.01 x P_f x E_{pp} x SA,

where:

E_{vp} = the volume (Megalitres) lost to evaporation from the pool water surface for a period 'p';

P_f = pan factor (Class A);

E_{pp} = pan evaporation for period 'p' (millimetres); and

SA = surface area of the pool.

16.   (New) The method of claim 3, wherein the evaporation losses can be determined by the formula:

E_{vp} = 0.01 x P_f x E_{pp} x SA,

where:

E_{vp} = the volume (Megalitres) lost to evaporation from the pool water surface for a period 'p';

P_f = pan factor (Class A);

E_{pp} = pan evaporation for period 'p' (millimetres); and

SA = surface area of the pool.

17.   (New) The method of claim 5, wherein said containment losses are divided into losses from theft, evaporation, seepage and leakage where losses from evaporation, seepage and leakage remain constant to allow the theft loss to be determined by said computational means.

18.   (New) The loss detection system of claim 8, wherein said containment losses are divided into losses from theft, evaporation, seepage and leakage where losses from evaporation,

seepage and leakage remain constant to allow the theft loss to be determined by said computational means.

19.   (New) The method of claim 12, wherein said containment losses are divided into losses from theft, evaporation, seepage and leakage where losses from evaporation, seepage and leakage remain constant to allow the theft loss to be determined by said computational means.